

Appl. No. 10/736,309
Amendment dated Feb. 28, 2006
Reply to Office Action of Nov. 29, 2005
Docket No. BOC9-2003-0058 (429)

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Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

Listing of Claims:

1. (Currently Amended) A gateway serving as an interface between a mobile network and a wireless network, wherein said gateway is configured to send a heightened signal strength indicator to the mobile network ~~thereby causing~~ for prompting the mobile network to recognize the gateway as a ~~[[valid]]~~ preferred path for handing off a call.
2. (Original) The gateway of claim 1, wherein the signal strength indicator is fabricated.
3. (Original) The gateway of claim 1, wherein the wireless network is configured according to one of the 802.11 wireless communications protocols.
4. (Original) The gateway of claim 1, wherein the gateway routes the call from the mobile network to a wireless access point of the wireless network via a packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.
5. (Original) The gateway of claim 1, further comprising:
a mobile network interface comprising a transport interface configured to exchange mobile control channel signaling data with the mobile network and a voice channel interface configured to exchange audio data with the mobile network;

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a mobile control and messaging component configured to communicate with the mobile network via said transport interface;

a call control component configured to format the mobile control channel signaling data from the mobile network for use over the packet-switched network;

a voice media conversion component configured to format voice data for sending using a real-time streaming protocol over the packet-switched network; and

an interface to exchange call control data and voice data with the packet-switched network.

6. (Original) The gateway of claim 5, wherein the interface to the packet-switched network is a Session Initiation Protocol interface.

7. (Currently Amended) Within a gateway interface, a method of call control between a mobile network and a wireless network comprising:

establishing, with a mobile network, a control messaging link for exchanging mobile control channel signaling data, and a voice channel link for exchanging audio data for a mobile call;

sending a heightened signal strength indicator to the mobile network thereby causing for prompting the mobile network to recognize the gateway as a preferred path for handing off the mobile call;

establishing a communications link with a packet-switched network; and

routing the mobile call from the mobile network to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

8. (Original) The method of claim 7, wherein the signal strength indicator is fabricated.

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9. (Original) The method of claim 7, said routing step comprising routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.

10. (Original) The method of claim 7, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.

11. (Currently Amended) A system for call control between a mobile network and a wireless network comprising:

means for establishing, with a mobile network, a control messaging link for exchanging control signal channel signaling data and a voice channel link for exchanging audio data for a mobile call;

means for sending a heightened signal strength indicator to the mobile network ~~thereby causing for prompting~~ the mobile network to recognize the system as a ~~[[valid]]~~ preferred path for handing off the mobile call;

means for establishing a communications link with a packet-switched network;
and

means for routing the mobile call from the mobile network to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

12. (Original) The system of claim 11, wherein the signal strength indicator is fabricated.

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13. (Original) The system of claim 11, said means for routing further comprising means for routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.

14. (Original) The system of claim 11, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.

15. (Currently Amended) A ~~machine-readable storage~~ computer-readable medium, having stored thereon a computer program having a plurality of code sections executable by a machine for causing the machine to perform the steps of:

establishing, with a mobile network, a control messaging link for exchanging mobile control channel signaling data and a voice channel link for exchanging audio data for a mobile call;

sending a heightened signal strength indicator to the mobile network ~~thereby causing for prompting~~ the mobile network to recognize the gateway as a preferred path for handing off the mobile call;

establishing a communications link with a packet-switched network; and

routing the mobile call from the mobile network to a wireless access point via the packet-switched network, such that the call is conducted via a wireless communications link using the wireless access point.

16. (Currently Amended) The ~~machine-readable storage~~ computer-readable medium of claim 15, wherein said signal strength indicator is fabricated.

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17. (Currently Amended) The ~~machine-readable storage computer-readable~~ medium of claim 15, said routing step comprising routing the mobile call to the wireless access point via the packet-switched network using Session Initiation Protocol.

18. (Currently Amended) The ~~machine-readable storage computer-readable~~ medium of claim 15, wherein the wireless access point is an 802.11 compliant wireless access point and the wireless network is configured according to one of the 802.11 wireless communications protocols.

19. (New) A method for mobile device handoff between a mobile network and a wireless network comprising:

- on a mobile device, detecting a wireless access point;
- on said mobile device, lowering a transmission power to said mobile network;
- on said mobile network, detecting a lower power signal from said mobile device and identifying systems available to handle communication with said mobile device; and
- on a gateway associated with said mobile device, indicating to said mobile network that a heightened signal strength has been received from the mobile communication device for prompting the mobile network to handoff to said gateway for providing connectivity between said mobile device and said wireless access point, wherein said heightened signal strength is not indicative of actual signal strength of said mobile device.

20. (New) The method of claim 19, further comprising

- on said mobile device, sending an invite through a wireless network to a SIP server;
- on said gateway, forwarding said invite to said SIP server via Internet; and
- authenticating a SIP user agent on said mobile device;

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21. (New) The method of claim 20, further comprising:
upon authenticating said SIP user agent, setting up an internet protocol (IP)
streaming session between said gateway and mobile device;
switching over from said mobile network to said gateway; and
tearing down a call between said mobile network and said mobile device, for
handing off said mobile device from a mobile network to a wireless network.